

**DRAFT REGULATIONS FOR THE USE OF  
CPVC PIPE WITHIN THE INTERIOR OF RESIDENTIAL STRUCTURES**  
(Based On The 1998 California Uniform Plumbing Code)

NOTE: The proposed text for the installation of CPVC pipe within the interior of residential structures is shown in *italic font and underlined*. Text to be deleted is shown in ~~strikethrough~~. Text shown in regular font exists Code.

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**CHAPTER 6----WATER SUPPLY AND DISTRIBUTION**

**Section 604.0 Materials**

**Section 604.1** Water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Cast iron fittings used for water need not be galvanized if over two (2) inches (51mm) in size. Asbestos-cement, CPVC, PE, or PVC water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC water pipe and tubing may be used for hot and cold-water distributions systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.

**Section 604.1a [HCD 1 & 2]** Water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Cast iron fittings used for water need not be galvanized if over two (2) inches (51mm) in size. Asbestos-cement, CPVC, PE, or PVC water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.

***Section 604.1b[HCD 1&2] Local Authority to Approve CPVC Pipe Within Residential Buildings Under Specified Conditions.***

*The local responsible building official of any city or county, in accordance with the procedures set forth in Chapter 3 (with the exception of section 301.2.7) may authorize by permit the use of CPVC for hot and cold-water distribution systems within the interior of residential buildings provided all of the following conditions are satisfied:*

- (a) **Finding Required.** The building official shall first make a determination that there is or will be the premature failure of metallic pipe if installed in such residential buildings due to existing water or soil conditions.*
- (b) **Permit Conditions.** Any building permit issued pursuant to this section shall be conditioned on compliance with the mitigation measures set forth in this section.*
- (c) **Approved Materials.** Only CPVC plumbing material listed as an approved material in, and installed in accordance with this code may be used.*
- (d) **Installation and Use.** Any installation and use of CPVC plumbing material pursuant to this section shall comply with all applicable requirements of this code and Section 301.0 of*

*Appendix I of this code, Installation Standard for CPVC Solvent Cemented Hot and Cold Water Distributions Systems, IAPMO IS 20-96.*

- (e) **Certification of Compliance.** *Prior to issuing a building permit pursuant to this section, the building official shall require as part of the permitting process that the contractor, or the appropriate plumbing subcontractors, provide written certification: (1) that is required in subdivision (f); and (2) that he or she will comply with the flushing procedures and worker safety measures set forth in Section 301.0 of Appendix I of this code, Installation Standard for CPVC Solvent Cemented Hot and Cold Water Distribution Systems IAPMO IS 20-96.*
- (f) **Worker Safety.** *Any contractor applying for a building permit that includes the use of CPVC plumbing materials authorized pursuant to this section shall include in the permit application a signed written certification stating that:*

  - (1) *They are aware of the health and safety hazards associated with CPVC plumbing installations.*
  - (2) *They have included in their Illness and Injury Prevention Plan the hazards associated with CPVC plumbing pipe installations; and*
  - (3) *The worker safety training elements of their Injury and Illness Prevention Plan meets the Department of Industrial Relation's guidelines.*
- (g) **Findings of Compliance.** *The building official shall not give final permit approval of any CPVC plumbing materials installed pursuant to this section unless he or she finds that the material has been installed in compliance with the requirements of this code and that the installer has complied with the requirements in section 301.0.1, of Appendix I of this code, Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distribution Systems, IAPMO IS 20-96.*
- (h) **Penalties.** *Any contractor or subcontractor found to have failed to comply with the ventilation, glove or flushing requirements of section 301.0 of Appendix I of this code, Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distribution Systems, IAPMO IS 20-96 shall be subject to the penalties in Health and Safety Code, division 13, part 1.5, chapter 6 (section 17995 et seq). In addition, if during the conduct of any building inspection the building official finds that the ventilation and glove requirements of section 301.0 of Appendix I of this code, Special Requirements for CPVC Installation within Residential Buildings, are being violated, such building officials shall cite the contractor or subcontractor for that violation.*

<p>APPENDIX I INSTALLATION STANDARDS IAPMO IS 20-96 Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distribution Systems</p>
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Installation governs the installation standard for CPVC hot and cold systems within buildings.

***Section 301.0 Special Requirements for CPVC Installation Within Residential Buildings Only. [HCD 1]***

*In addition to the other requirements in the California Plumbing Code and this Appendix for the Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distributions Systems, all installations of CPVC pipe within residential structures shall meet the following.*

***301.0.1 Flushing Procedures.***

*301.0.1.1 All installations of CPVC pipe within residential structures shall be flushed twice over a period of at least one week. The pipe system shall be first flushed for at least 10 minutes and then filled and allowed to stand for no less than 1 week, after which all the branches of the pipe system must be flushed long enough to fully empty the contained volume. At the time of the fill, each fixture shall have a removable tag applied stating:*

*“This new plumbing system was first filled on (date) by (name). The California Department of Housing and Community Development requires that the system be flushed after standing at least one week after the fill date specified above. If the system is used earlier than one week after the fill date, the water must be allowed to run for at least two minutes prior to use for human consumption. This tag may not be removed prior to flushing, except by the homeowner.”*

***301.0.2 Worker Safety Measures.***

*301.0.2.1 Mechanical ventilation sufficient to maintain exposures below the relevant exposure limits established by state regulations shall be provided in enclosed spaces. This ventilation shall be directed at the breathing zone of the worker installing the pipe. Where mechanical ventilation is not practical, respirators, suitable for organic vapors, shall be used. For the purpose of this subdivision, and enclosed space is defined as:*

- (a) A space less than 100 square feet of floor area under a ceiling with a height of 10 feet or less, and which does not have openings (consisting of doors, windows, or unfinished walls) on at least two sides;*
- (b) Crawl spaces having a height of less than three feet;*
- (c) Enclosed attics that have a roof and ceiling; or*
- (e) Trenches having a depth greater than twenty-four inches.*

*3.01.0.2.2 Installers of CPVC pipe within residential structures shall use non-latex thin gauge (4 millimeters) nitrile gloves, or other gloves providing an equivalent or better degree of protection during the installation of the CPVC plumbing system. Gloves shall be provided to all workers by the contractor, or plumbing subcontractor, and shall be replaced upon contamination by cements.*

**Section 301.1 Minimal Standards**

**301.1.1. Materials** shall comply with the following . . .

**Primer** 1 - Listed primers shall be used . . .

**301.1.2.3 Solvent Cement** . . .

**301.1.2.4.1 Primer** . . .

**Section 316.1 Solvent Cement Joints**

**316.1.1 Safety Requirements and Precautions** (*FN from Appendix of XI ASTM 2564-88*)

(b) Use of ventilating devices.

(c) Proper eye protection

(g) Proper gloves impervious to and unaffected by . . .

**316.1.1.1 Selection.** Follow manufacture recommendations

**316.1.1.3 Primer** Listed primer in compliance with ASTM F 656-93

**609.0 Installation, Inspection and Testing**

- Location Prohibition
- Water Heater distance limitation
- Identification
- Testing - no air testing allowed.